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Property-led urban, town and rural regeneration in Ireland: positive and perverse outcomes in different implementation contexts

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In the mid-1980s fiscal incentives were introduced to encourage the construction and refurbishment of residential developments in declining inner city districts in Ireland. These were abolished in 2006 but, during the intervening period, their focus was extended to include: large towns; small towns and a large rural region. Concurrently the context for their implementation changed as economic boom replaced prolonged economic stagnation. This paper examines the changing design of these incentives, their outputs and their intended and unintended impacts. It argues that, initially they were successful in drawing development into declining neighbourhoods but the extension of their lifespan and spatial focus created negative perverse impacts and deadweight costs for the exchequer. Thus it concludes that this regeneration strategy is useful for animating development in brownfield sites, where there is demand for housing but also barriers to its development. If applied to rural areas where housing demand is weaker they can generate excess supply and limited benefits for public investment.

Keywords: tax expenditures, property development, regeneration, urban decline, rural decline

Introduction

Government concerns about declining regions and neighbourhoods increased significantly after World War II and since then a large variety of methods have been employed in western countries to regenerate areas of this type. In cities these efforts initially focused on clearing (largely private rented) slums and providing replacement housing (often social rented), but following widespread criticism of its destabilising effects on community cohesion, by the 1960s regeneration programmes focused more on refurbishing existing dwellings and addressing social problems by improving social services (Carmon, 1999). From the 1980s, urban regeneration fashion changed again and, as an alternative to the public sector driving development, more attention was paid to attracting private sector investment (Roberts, 2000). Although, property development remained the most common strategy used to address economic and population decline in these districts. Thus in the parlance of this policy field, regeneration remained largely 'property led' (Healy, *et al,* 1992; Jones, 1996).

Traditionally western governments have employed quite different strategies to regenerate declining rural areas. Until recent decades these have focussed overwhelmingly on supporting the agricultural sector, via for instance the European Union's Common Agricultural Policy. Since the 1990s however, rural development goals have shifted to reflect the 'post-productivist' role of the countryside, due to the decline of agriculture (van der Ploeg *et al*., 2000; Murdoch *et al*., 2003).. Thus they have increasingly emphasized: environmental conservation, agri-tourism and economic diversification, sustainable use of natural resources, improving the quality of life in rural areas and village renewal (Dywer *et al.,* 2007). In contrast to urban areas therefore, property-led regeneration strategies and housing development in particular have rarely been employed in the rural development context. Indeed despite concerns about population decline, particularly in north western Europe, many governments have actively constrained new housing development in rural; areas, rather than promoted it (Scott and Murray, 2009).

Urban regeneration policy in the Republic of Ireland has broadly reflected these international trends. It has been strongly property-led and, in keeping with the norm in other Anglophone countries such as USA and the UK in recent decades, was operationalised mainly using fiscal incentives, rather than direct public spending (Adair *et al.,* 2003; Jones and Evans, 2008). Thus, the principal Irish urban regeneration intervention of recent decades – the Urban Renewal Scheme, encompassed a package of fiscal incentives (popularly known 'Section 23' incentives after the clause of the legislation which underpinned them) which enabled the construction or refurbishment costs of commercial premises or dwellings for owner-occupation or for-profit renting to be off-set against income or business tax. These were introduced in 1986 and applied initially to declining districts in the inner areas of Ireland's five cities but were extended in the early 1990s to target declining city suburbs and again in 1999 to include parts of 38 large towns (Williams, 2006). More unusually, in the international context, also in 1999, this same package of fiscal incentives was applied to a sparsely populated region of the north-west, under a programme called the Rural Renewal Scheme. Furthermore, in 2000 the Section 23 incentives

extended again to include parts of 100 small towns, under the Town Renewal Scheme (Goodbody Economic Consultants, 2005). In terms of public expenditure Section 23 was by far the most significant urban and rural regeneration programme established in Ireland in the last three decades. It cost the exchequer an average of €370 million per annum (in tax revenue forgone) between 1999 and 2004 (Goodbody Economic Consultants, 2005). Whereas, the LEADER Programme (the principal direct pubic investment programme in rural areas) cost just €12.3m per annum to run between 2000 and 2006 and its urban equivalent (the Partnerships), cost €30.1m per annum concurrently (Fitzpatrick Economic Consultants, 2005).

Compared to similar programmes in other countries, the Section 23 incentives were distinguished by very high take-up rates and consequent success in driving the physical development of target areas and combating dereliction (Adair *et al*., 2003). However, despite this success, they attracted significant criticism during their lifetime and retrospectively, since their abolition in 2006. During the opening phase of the Urban Renewal Scheme the Irish economy was in a prolonged period of recession/stagnation and although the Scheme was successful in addressing the dereliction which was widespread in target neighbourhoods, it was criticized for its failure to improve the social conditions of the communities indigenous these districts and for the poor building and urban design standards of the developments it subsidized (KMPG, 1996; MacLarran and Murphy, 1997). During the later phase of the Section 23 programmes, the implementational context changed radically, as the economy began to grow (Irish GDP per capita increased from 10% below the EU15 average in 1995, to 35% above than in 2007), which drove population growth and, in tandem increased with increased credit availability, contributed to an unprecedented house price and building boom (Honohan and Walsh 2002; Norris and Sheilds, 2007). During this phase of the incentives, concerns were raised about deadweight (developments which would have gone ahead anyway, in the absence of fiscal incentives), and their role in enabling tax avoidance among high-income households, which led to the abolition of the Urban, Town and Rural Renewal Schemes in 2006 (Department of Finance, 1999; Goodbody Economic Consultants, 2005). Since their abolition these schemes have also attracted

considerable negative retrospective analysis in the Irish media and from researchers. They have been blamed for over stimulating the construction sector the collapse of which, following the emergence of the global financial crisis in 2007, greatly augmented the sharp economic and employment contraction Ireland suffered (eg. McDonald and Sherridan, 2008; O'Brien. 2008). In addition, academic research has linked Section 23 to the marked growth in vacant dwellings in Ireland since the mid 1990s (Fitz Gerald, 2005) and to the proliferation of empty or partially occupied and often uncompleted 'ghost estates' in some parts of the country, which are the most visually striking legacy of the housing building boom and collapse (Kitchin *et al.,* 2010).

Despite their significance in terms of scale and cost and the controversy they have generated, the Section 23 incentives the research and evidence base on their impact is patchy. The academic research consists principally of case-studies of the Urban Renewal Scheme's impact on a single district, city or region (e.g. MacLarran and Murphy, 1997; Williams, 2006) and two analyses of the Rural Renewal Scheme (Gkartzios and Norris, 2011; Keane and Garvey, 2006). Notably, the Town Renewal Scheme has attracted no research interest to date. Government commissioned a detailed review of the opening phase of the Section 23 programme and a more cursory review of its closing phase (KPMG, 1996; Goodbody Economic Consultants, 2005). However, to date, no comprehensive assessment of their design, implementation, costs and impacts over their lifetime has been conducted.

This paper aims to address this omission by assessing the intended and unintended impacts of the Section 23 incentives collectively and on the different districts and regions they targeted. In view of the marked changes in socio-economic and policy context during the implementation of the Section 23 incentives and the variety of spatial contexts to which they were applied, it is also envisaged that this analysis will elucidate the optimum policy and socio-economic conditions for successful residential property-led regeneration and programme design and implementation strategies and therefore be of interest to an international audience.

To achieve these aims, regression analysis of census small area data is employed to measure the success of the various types of Section 23 incentives in achieving their stated (ie intended) aims. Additional regression analysis together with data from scheme evaluations to examine the principal unintended impacts identified in the literature – deadweight and vacant dwellings (KPMG, 1996; Goodbody Economic Consultants, 2005; Fitz Gerald, 2005).

The discussion of these issues presented here is organized into seven further sections. The next section details the methodology which underpins this analysis. This is followed by a discussion of the design and outputs of the Urban, Town and Rural Renewal Schemes and then of their intended and unintended impacts. The conclusions to the paper draw out the key findings of the preceding analysis and reflect on their implications for regeneration policy in Ireland and internationally.

Methodology

Data

The first stage in the implementation of this research involved the construction of a Geographical Information Systems (GIS) layer of the neighbourhoods designated as eligible for the Section 23 incentives. These were identified from the national legislation or land use planning documents which underpin the incentives. The Electoral Divisions (EDs) in which the designated areas are located were then identified. These are the smallest geographical areas for which census micro-data (called small area population statistics, or SAPS) are collected.

Because the Section 23 incentives remained in place for twenty years and the neighbourhoods included had changed over that period, these districts were divided into four groups for the purposes of this analysis. Data from the 2002 and 2006 censuses were employed to examine the neighbourhoods included in the Urban, Town and Rural Renewal Schemes between 1999 and

2006. The Urban Renewal Scheme was established much earlier than the other programmes, therefore the EDs included in this scheme between 1985 and 1998 were examined using SAPS data from the 1991 and 1996 censuses.

In relation to the unintended impacts of the Section 23 incentives, unpublished 2006 census data were used to examine their impact on vacant dwellings. A geo-referenced database of ghost estates compiled by the housing ministry in 2009 was superimposed on the GIS layer of Section 23 areas to identify any spatial coincidence and examine the impact of the incentives on these developments (Department of the Environment, Community and Local Government, 2010). Deadweight was examined using evidence generated from the two major reviews of these incentives commissioned by government (KPMG, 1996; Goodbody Economic Consultants, 2005).

Variables

The stated aims of the Section 23 incentives were identified from relevant policy documents and legislation and summarized in the next section of this paper. Following Hemphill *et al.* (2004), an 'indicator-based approach' was employed to assess the extent to which these were achieved. Thus, the following census variables were employed as indicators of these aims:

- Population change: percentage change between the various years under examination in the total numbers of residents living in the Section 23 designed EDs
- Labour market change: percentage change in the total numbers of men and women in employment resident in these EDs, and
- Private renting households: percentage change in the total number of occupied private rented dwellings in these EDs.

These indicators of the stated aims of the Section 23 incentives were compared to the numbers of years for which each of the various EDs under examination included in this programme. 'Duration of designation' was used as a proxy indicator of the intensity of the Section 23 intervention for practical reasons, because information on more direct indictors such as number of

dwellings subsidized or total value of investment were not available for the entire period under examination and could not be disaggregated into small area units.

Analysis

Using the data and variables a model of the relationship between the duration of designation (in years) under the Urban, Rural and Town Renewal Schemes and the three indicators of their stated objectives (ie. change in population, employment and private rented dwellings) and vacant dwellings and ghost estates was constructed. In this model duration of designation was the primary independent variable and the stated objectives and unintended outcomes of the Section 23 schemes were the dependent variables.

In order to more comprehensively explain the predictive power of our principal explanatory variable (and the overall R^2 of our model) a number of controls were also incorporated into the model. These took account the proportionate change in each of following between the years under examination: older peoples' dependency ratio (ie. people aged 65+ as a percentage of the total population); younger (aged <5 years) peoples' dependency ratio; and educational attainment (or the proportion of persons in each ED who held third-level qualifications). The model was estimated using only the duration of designation as an independent variable first of all before the controls were included as independent variables and the indicators of the stated aims and unintended impacts of the Section 23 incentives were included as dependent variables to estimate the full model. Thus, in the case of the stated aim of increasing the population of Section 23 designated areas the model can be summarised as:

$$\alpha \approx \beta_1 Dur + \beta_2 \Delta AtWork + \beta_2 \Delta CapForm. + \beta_4 \Delta Educ + \beta_5 \Delta Dep.Young + \beta_6 \Delta DepOld + e$$

Where: α is the stated aim (or in the case of other analyses, the unintended impact of the Section 23 incentives), $\beta_1 \mathrm{Dur}$ is an independent variable denoting the length of designation in years (by 2006), followed by the remaining independent variables and the control variables.

The equations underpinning these three distinct models were estimated using a standard OLS regression. This technique is used to assess how well a particular predictor (independent) variable explains a dependent variable. It also gives an indication of the relative importance of the predictor variables and of the direction of the relationship between the independent and dependent variables (Hosmer and Lemeshow, 2000).

Shortcomings

This methodology has some significant shortcomings, but these were due to the limitations of the available data and were therefore unavoidable.

For instance, the EDs used for this analysis are generally larger than the sites designated under the Urban and Town Renewal Schemes (but not for the Rural Renewal Scheme). This problem was unavoidable because data for sites included in the programme were not available.

Due to the shortage of robust small area socio-economic data on Ireland the analysis draws mainly on the SAPS. However this limited the analysis in a number of important respects:

- Census variables also changed between 1996 and 2006, which limited the choice of indicator variables that could be employed in this analysis.
- Only a limited number of socio-economic profiling variables (i.e. employment, household size, education, etc.) are included in the SAPS thus, the range and type of control variables that could be included in the model are narrow.
- The SAPS data which were used in this analysis have some shortcomings. For instance, employment data does not differentiate between full-time and part-time workers. The housing data simply provide a count of the number of *occupied* units at the ED-level (by tenure), they do not identify the units that have been refurbished, demolished or extended over time.
- The SAPS data does not contain any information regard to house price or housing quality changes at the level of each ED. Similarly, no micro-level data on economic growth rates, consumer price developments, household income and/or the type of employment undertaken

are available in Ireland which greatly limited the controls which could be incorporated into the model.

- 'Vacancy rate' micro data were only available for 2006. These data were available on a regional and national level for previous years but could not be disaggregated at ED level.

Furthermore, the indicator-based approach cannot demonstrate a definitive causal relationship between the various Section 23 interventions and the developments in target populations which are employed as indicators of their achievements. It can only highlight a coincidence or the lack of, between the two (see: Wong, 2006). .

Design

Measures to regenerate inner-cities, particularly the very run-down centre of Dublin – Ireland's capital and largest city, were under consideration by policy makers for several years prior to the introduction of the Section 23 incentives. Indeed, legislation underpinning a multi-faceted regeneration was introduced in 1981, but not implemented due to lack of government resources (Williams, 2006). Instead, in 1986 the following, narrower package of Section 23 fiscal allowances were introduced in inner city areas, under the auspices of the Urban Renewal Scheme:

- capital spending on the building or refurbishment of commercial premises can be offset against income or business tax as can the rent paid on these buildings,
- remission of local business taxes for a ten year period,
- capital spending on the building or refurbishment of residential premises can be offset against income tax by owner occupiers, or against tax on rental income by landlords for a ten year period (KPMG, 1996).

According to the finance ministry the rationale and objectives of the scheme were as follows:

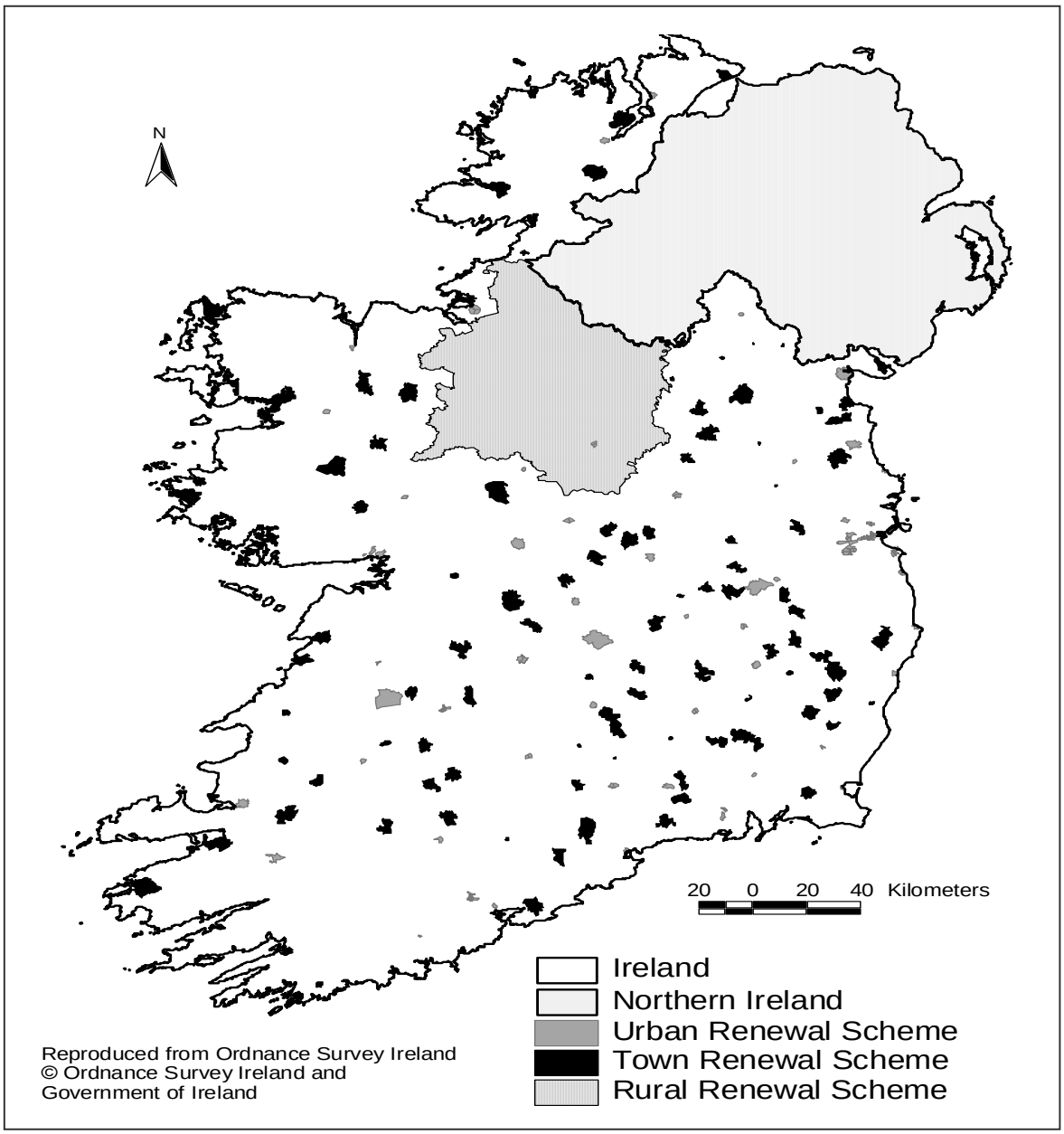
> In many cases these inner areas had sustained large population declines as growth and development was increasingly concentrated in the suburbs. The core objectives of the scheme were to promote urban renewal and redevelopment by promoting investment and reconstruction of buildings in designated areas (Department of Finance, 1999, p. 1).

In 1986 the Urban Renewal Scheme applied the Section 23 incentives to parts of 23 EDs in the inner areas of Ireland's five cities (see Figure 1). These designated areas were identified on the basis of consultation between the relevant local authorities and the environment ministry rather than a formal system of applications or bidding (KMPG, 1996). The number of EDs designated under the Urban Renewal Scheme was increased on a several occasions in the late 1980s and early 1990s, with the result that districts in over 100 EDs in 35 urban areas were eligible for these reliefs by 1998.

Central government commissioned a review of the Urban Renewal Scheme in 1996, which concluded that it had been highly successful in attracting investment and addressing dereliction in designated areas, but raised concerns about: deadweight, the poor architectural quality of many of the developments it subsidised, the low take-up of the incentives for refurbishment and its limited success in effecting the socio-economic regeneration of target neighbourhoods (KPMG, 1996).

A revised version of the Urban Renewal Scheme, which took account of the criticisms raised in this review, was launched in 1998. This new iteration required local authorities to prepare Integrated Area Plans (IAPs) for each urban area they wished to qualify for the fiscal incentives. IAPs plan for the social, economic as well as the physical renewal of the district in question and must be taken into account in planning decisions. A total of 78 IAPs were submitted and a central government appointed expert group approved 49 plans, which encompassed 114 EDs. In an effort to minimize deadweight, on this occasion designation was confined to individual sites, rather than entire districts. However, the package of Section 23 tax incentives made available, remained unchanged (Department of the Environment, 1997).

Figure 1 Electoral Divisions Included in the Urban, Town and Rural Renewal Schemes, 1986-2006.



The Town Renewal Scheme was introduced in 2000. It extended the same package of Section 23 fiscal incentives to towns with population between 500 and 6,000 people. The environment ministry justified this decision on the grounds that: 'very few urban centres of less than 6000 population were likely to be able to meet the criteria for [inclusion in the Urban Renewal Scheme] which assumes urban characteristics of a certain scale' (Department of the Environment and Local Government, 1999: 4). In addition to improving dilapidated sites in target areas, the stated objectives of the Town Renewal Scheme included the promotion of the cultural and local heritage of the town, the curtailment of counterurbanisation trends and the promotion of tourism and, wider, sustainable development plans (Ibid).

The Rural Renewal Scheme, which was implemented from 1999, targeted five local government operational areas (called counties) in the largely rural north-west region (see Figure 1). The finance ministry justified the selection of this area on the grounds of prolonged population decline, below average economic growth and the lack of significant urban centres (Department of Finance, 1999). Although Rural Renewal areas qualified for the same package of Section 23 incentives as Urban and Town Renewal Scheme areas, arrangements for the selection of Rural Renewal target areas differed significantly from the other two. Rural Renewal Scheme areas were selected centrally by the finance ministry and local authorities were not required to prepare any equivalent to an IAP in order to inform this process. Girst (2003: 250) among others criticised these arrangements on the grounds that 'unlike the later models of urban renewal schemes, the rural renewal scheme returned to the broad approach of designating large geographical areas without any specific planning framework to guide and focus development'. Notably, Gkartzios and Norris (2011) suggested that decisions regarding the spatial targeting of the Rural Renewal Scheme were based primarily on the political consideration that this region contains no towns and cities eligible for inclusion in the Urban and Town Renewal Schemes, rather than the extent of population decline, which is less than severe compared to other rural Irish regions.

Output:

No comprehensive data on the investment generated by Section 23 tax incentives over its lifetime and the associated residential construction have been published by government. The only available output information was published in the two aforementioned reviews of these incentives (KMPG, 1995; Goodbody Economic Consultants, 2005). These data, which cover the periods 1986 to 1995 and 2000 to 2004, are summarized in Table 1 below.

The KMPG (1996) review concluded that the Urban Renewal Scheme was highly successful in attracting investment to designated areas between 1986 and 1995 (KPMG, 1996). This averaged at €247.2 million per annum between these years and focussed mainly the development of new build industrial and commercial premises. This phase of the Urban Renewal Scheme also resulted in the construction or refurbishment of 7,603 dwellings, accounting for 18% of total housing output in the target cities between these years (KPMG, 1996). 63% of this residential investment generated was in the city of Dublin and 60% of the residential units subsidised were owned by private landlords. The remainder were owner-occupied. The KPMG (1996) review links this outcome to the fact that more lucrative financial incentives were available to landlords. It concluded that the Urban Renewal Scheme had been very successful in addressing dereliction in target areas, but complained about the poor architectural quality of many of the developments it subsidised, the low take-up of the refurbishment incentives and the limited benefits generated for the largely, low-income communities, indigenous to target areas.

A review of the post 1998 phase of the Urban Renewal Scheme by Goodbody Economic Consultants (2005) found it generated an annual average investment of €320.3 million between 1999 and 2004, of which a total of €612.5 million was in respect of residential activity. Over half

Table 1 Investment and Property Development Generated By the Section 23 Tax Incentives, 1986-1995 and 2000-2004.

Category	**Details**	**Rural Renewal Scheme**	**Urban Renewal Scheme**		**Town Renewal Scheme**
		2000-2004	1986-1995	2000-2004	2000-2004
Investment *of which is:*	Total (€m)	453.4	2,225.6	1,281.0	122.6
	Residential (%)	87.9	28.0	47.6	55.1
	Commercial/ industrial (%)	21.1	72.0	52.1	44.6
	New Build (%)	96.3	89.0	93.2	54.3
	Refurbishment (%)	3.6	11.0	6.8	45.7
Dwelling Output	N	4320	7,583	4,527	988
	As a % of total output in designated areas	23.3	17.8	Nav	Nav

Source: KPMG (1996) and Goodbody Economic Consultants (2005)
Note: Nav means not available/

of this investment occurred in the Dublin area; 19% occurred in provincial towns and provincial cities accounted for the rest. In keeping with pre-1998 trends, the bulk of the total investment in the post 1998 phase was on new-build developments and this enabled the development of 426 residential and commercial developments, which contained 4,500 residential units. The review concluded that these developments had very positive effects on reducing dereliction and that their architectural quality was better than those subsidised by the earlier stage of the Urban Renewal Scheme.

Investment generated by the Town Renewal Scheme was relatively low compared to the other applications of the Section 23 incentives - it averaged €30.7 million per annum between 1999 and 2004. Goodbody Economic Consultants (2005) attributed this poor take-up to elements of its design (such as its designation of sites as suitable for refurbishment rather than new build projects which proved unattractive to developers) and local authorities' management of the Town Renewal Scheme (such as poor marketing of the scheme and limited support for potential developers). However their analysis identified stringent targeting is the biggest barrier to implementation. Owners of many designated sites were not interested or able to develop them, in other cases, developers failed to secure planning permission.

Total investment generated by the Rural Renewal Scheme between 1999 and 2004 averaged €113.3 million per annum - somewhat higher than that generated by Town Renewal and lower than the Urban Renewal Scheme investment. The proportion of this devoted to residential investments and new building was high compared to the other Section 23 schemes. The Rural Renewal Scheme subsidised the construction and refurbishment of 10,596 residential units by the end of 2006 of which 6,358 were bought by owner occupiers and the reminder by private landlords (Goodbody Economic Consultants, 2005). This residential development accounted for 18% of housing output in the Rural Renewal Scheme area and was a key driver of the radical increase in housing output in this region during the early 2000s. Housing ministry data indicates that house building in the five counties subject to the Rural Renewal Scheme increased from 5.6

to 10.6% of total national output between 1999 and 2006 (Department of the Environment, Community and Local Government, various years).

Collective Impact

The results of regressions of the duration of Section 23 designation and the achievement of their stated aims in all of the 3,409 EDs targeted are set out in Table 2 to 4.

The results of the full version of estimation model presented in Table 2, indicates duration of designation is negatively related to the scale of population change in target districts over time. These results indicate that factors such as changes to dependency ratios and the number of people in employment are more important predictors of the total number of inhabitants in the districts under examination than the duration of Section 23 designation.

In contrast, the results set out in Table 3 indicates that there is a statistically significant relationship between duration of designation under the Section 23 incentives and the change in the number of residents of target EDs who are in employment. Moreover, in this case the full version of the model succeeds in explaining a high degree of the observed variance and the variables employed here appear to be jointly significant. Although, as mentioned above, these the employment data employed in this analysis does not differentiate between the full and part-time posts.

Finally, the results of the estimation model presented in Table 4 indicate that there is a statistically significant relationship between duration of Section 23 designation and the change in the numbers of private renting households, but the former has had a negative effect on this

Table 2: Regression of Population Change on Duration of Designation with Socio-Economic Controls

Variable	All Cases				Urban Renewal Scheme (to 2006)				Urban Renewal Scheme (to 1996)				Rural Renewal Scheme				Town Renewal Scheme			
	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value
Constant	16.06	0.76	21.2	**0.00**	25.62	2.45	10.48	**0.00**	6.83	1.35	5.09	**0.00**	12.36	0.47	25.87	**0.00**	35.29	3.91	9.02	**0.00**
Designation Duration (Y)	0.63	0.23	2.80	**0.01**	1.15	0.48	2.38	**0.02**	0.68	0.61	1.12	0.26	-1.13	0.21	-5.39	**0.00**	-3.17	0.95	-3.31	**0.00**
	Number of obs = 3,409 R-squared = 0.002 Adj R-squared = 0.002				Number of obs = 905 R-squared = 0.0062 Adj R-squared = 0.0051				Number of obs = 883 R-squared = 0.0014 Adj R-squared = 0.0003				Number of obs = 2,289 R-squared = 0.013 Adj R-squared = 0.012				Number of obs = 215 R-squared = 0.049 Adj R-squared = 0.045			
With Controls																				
Constant	-0.44	0.27	-0.16	0.87	5.23	0.76	6.84	**0.00**	3.59	0.82	4.39	**0.00**	-0.96	0.22	-4.35	**0.00**	6.47	1.17	5.54	**0.00**
Designation Duration (Y)	-0.33	0.05	-7.08	**0.00**	-0.53	0.09	-5.89	**0.00**	0.20	0.33	0.62	0.54	0.06	0.00	39.73	0.27	-0.11	0.09	-1.21	0.23
Old Dependency Ratio	0.05	0.00	18.09	**0.00**	0.02	0.00	3.76	**0.00**	-0.41	0.02	-20.6	**0.00**	0.16	0.00	39.73	**0.00**	0.14	0.01	9.90	**0.00**
Young Dependency Ratio	0.38	0.01	56.69	**0.00**	0.45	0.02	22.58	**0.00**	0.02	0.01	1.83	0.07	0.33	0.00	72.16	**0.00**	0.48	0.03	18.12	**0.00**
Educ. Attain.	0.00	0.00	-4.14	**0.00**	-0.01	0.00	-10.0	**0.00**	0.01	0.00	1.25	0.21	0.00	0.00	0.04	0.97	-0.00	0.00	-2.73	**0.01**
Lab. Market	0.79	0.00	229.1	**0.00**	0.81	0.01	135.7	**0.00**	0.16	0.01	26.85	**0.00**	0.79	0.05	172.9	**0.00**	0.83	0.01	70.80	**0.00**
Private Renting	0.00	0.00	-6.39	**0.00**	-0.00	0.00	-0.48	0.63	0.01	0.00	21.96	**0.00**	0.00	0.00	6.83	**0.00**	0.00	0.00	1.22	0.22
	Number of obs = 3,409 R-squared = 0.9570 Adj R-squared = 0.9569 F (6, 3,402)= 12,608.41 Prob>F= 0.0000				Number of obs = 905 R-squared = 0.9675 Adj R-squared = 0.9672 F (6, 898)= 4,449.68 Prob>F= 0.0000				Number of obs = 883 R-squared = 0.7184 Adj R-squared = 0.7165 F (6, 876)= 372.51 Prob>F= 0.0000				Number of obs = 2,289 R-squared = 0.9454 Adj R-squared = 0.9452 F (6, 2,282)= 6,579.61 Prob>F= 0.0000				Number of obs = 215 R-squared = 0.9919 Adj R-squared = 0.9916 F (6, 208)= 4,219.95 Prob>F= 0.0000			

Table 3: Regression of Employment Change on Designation Duration with Socio-Economic Controls

Variable	All Cases				Urban Renewal Scheme (to 2006)				Urban Renewal Scheme (to 1996)				Rural Renewal Scheme				Town Renewal Scheme			
	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value
Constant	35.9	0.93	37.3	**0.00**	44.27	3.15	14.03	**0.00**	20.78	4.39	4.74	**0.00**	32.89	0.58	56.53	**0.00**	59.23	4.91	12.06	**0.00**
Designation Duration (Y)	1.55	0.29	5.44	**0.00**	2.77	0.62	4.45	**0.00**	-0.13	1.98	-0.07	0.95	-1.27	0.26	-5.00	**0.00**	-3.61	1.19	-3.01	**0.00**
	Number of obs = 3,409 R-squared = 0.009 Adj R-squared = 0.008				Number of obs = 905 R-squared = 0.021 Adj R-squared = 0.020				Number of obs = 883 R-squared = 0.0000 Adj R-squared = 0.0011				Number of obs = 2,289 R-squared = 0.011 Adj R-squared = 0.010				Number of obs = 215 R-squared = 0.041 Adj R-squared = 0.036			
With Controls																				
Constant	1.25	0.32	3.82	**0.00**	-5.27	0.93	-5.65	**0.00**	2.27	3.52	0.65	0.52	2.59	0.26	9.79	**0.00**	-8.18	1.37	-5.98	**0.00**
Designation Duration (Y)	0.47	0.06	8.12	**0.00**	0.67	0.10	6.17	**0.00**	-1.57	1.39	-1.12	0.26	-0.18	0.06	-2.98	**0.00**	0.12	0.11	1.05	0.29
Old Dependency Ratio	-0.07	0.00	-22.7	**0.00**	-0.03	0.01	-5.70	**0.00**	0.62	0.10	6.09	**0.00**	-0.22	0.01	-45.9	**0.00**	-0.18	0.02	-10.64	**0.00**
Young Dependency Ratio	-0.46	0.01	-54.9	**0.00**	-0.54	0.02	-22.5	**0.00**	-0.18	0.06	-3.26	**0.00**	-0.39	0.01	-64.9	**0.00**	-0.56	0.03	-17.51	**0.00**
Educ. Attain.	0.00	0.00	5.48	**0.00**	0.02	0.00	13.74	**0.00**	-0.00	0.02	-0.20	0.84	0.00	0.00	0.69	**0.49**	0.02	0.00	4.94	**0.00**
Pop. Growth	1.18	0.01	229.1	**0.00**	1.18	0.01	135.7	**0.00**	2.85	0.11	26.85	**0.00**	1.17	0.01	172.9	**0.00**	1.16	0.02	70.80	**0.00**
Private Renting	0.00	0.00	13.90	**0.00**	0.00	0.00	1.08	0.28	-0.02	0.00	-15.8	**0.00**	-0.00	0.00	-2.85	**0.00**	0.00	0.00	0.19	0.85
	Number of obs = 3,409 R-squared = 0.9606 Adj R-squared = 0.9605 F (6, 3,402)= 13,828.39 Prob>F= 0.0000				Number of obs = 905 R-squared = 0.9718 Adj R-squared = 0.9717 F (6, 898)= 5,165.03 Prob>F= 0.0000				Number of obs = 883 R-squared = 0.5193 Adj R-squared = 0.5160 F (6, 876)= 157.71 Prob>F= 0.0000				Number of obs = 2,289 R-squared = 0.9455 Adj R-squared = 0.9453 F (6, 2,282)= 6,595.2 Prob>F= 0.0000				Number of obs = 215 R-squared = 0.9927 Adj R-squared = 0.9925 F (6, 210)= 4,703.08 Prob>F= 0.0000			

Table 4: Regression of Private-rented Stock on Designation Duration with Socio-Economic Controls

Variable	All Cases				Urban Renewal Scheme (to 2006)				Urban Renewal Scheme (to 1996)				Rural Renewal Scheme				Town Renewal Scheme			
	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value
Constant	239.9	12.15	19.76	**0.00**	717.5	154.32	4.65	**0.00**	320.7	117.7	2.73	**0.01**	193.5	6.18	31.3	**0.00**	271.0	21.35	12.69	**0.00**
Designation Duration (Y)	0.95	3.60	0.26	0.79	-25.8	30.45	-0.85	**0.00**	-20.9	53.2	-0.39	0.69	-2.28	2.71	-0.84	0.40	-15.4	5.22	-2.96	**0.00**
	Number of obs = 3,409 R-squared = 0.0000 Adj R-squared = 0.0000				Number of obs = 905 R-squared = 0.0008 Adj R-squared = 0.0003				Number of obs = 883 R-squared = 0.0002 Adj R-squared = 0.0010				Number of obs = 2,289 R-squared = 0.0000 Adj R-squared = 0.0000				Number of obs = 215 R-squared = 0.040 Adj R-squared = 0.035			
With Controls																				
Constant	-19.0	17.52	-1.09	0.28	253.82	269.24	0.94	0.35	-112	107.5	-1.04	0.29	97.74	11.35	8.61	**0.00**	55.30	52.03	1.06	0.29
Designation Duration (Y)	-10.8	3.08	-3.50	**0.00**	-50.13	31.55	-1.59	0.11	-50.0	42.60	-1.17	0.24	2.16	2.61	0.83	0.41	-3.52	3.89	-0.90	0.37
Old Dependency Ratio	2.06	0.17	11.81	**0.00**	1.66	1.49	1.11	0.27	25.5	3.06	8.33	**0.00**	-0.75	0.27	-2.72	**0.01**	0.15	0.73	0.22	0.83
Young Dependency Ratio	2.13	0.61	3.50	**0.00**	1.36	8.55	0.16	0.87	-4.81	1.72	-2.78	**0.01**	-2.52	0.44	-5.80	**0.00**	-2.18	1.77	-1.23	0.22
Educ. Attain.	0.04	0.01	3.51	**0.00**	0.58	0.33	1.75	0.08	0.69	0.53	1.29	0.19	-0.00	0.01	-1.09	0.27	-0.04	0.14	-0.29	0.77
Pop. Growth	-7.08	1.11	-6.39	**0.00**	-5.47	11.47	-0.48	0.63	77.26	3.51	21.96	**0.00**	7.35	1.07	6.83	**0.00**	3.53	2.88	1.22	0.22
Lab. Market	12.4	0.89	13.90	**0.00**	10.21	9.47	1.08	0.28	-14.4	0.91	-15.8	**0.00**	-2.54	0.89	-2.85	**0.00**	0.46	2.45	0.19	0.85
	Number of obs = 3,409 R-squared = 0.2911 Adj R-squared = 0.2898 F (6, 3,402)= 232.82 Prob>F= 0.0000				Number of obs = 905 R-squared = 0.297 Adj R-squared = 0.232 F (6, 898)= 4.58 Prob>F= 0.0000				Number of obs = 883 R-squared = 0.3777 Adj R-squared = 0.3734 F (6, 876)= 88.60 Prob>F= 0.0000				Number of obs = 2,289 R-squared = 0.1090 Adj R-squared = 0.1067 F (6, 2,282)= 46.54 Prob>F= 0.0000				Number of obs = 215 R-squared = 0.5183 Adj R-squared = 0.5044 F (6, 208)= 37.30 Prob>F= 0.0000			

investment. This result is surprising in view of the high numbers of private rented subsidised by the scheme, as outlined above, which in turn reflects the structure of the incentives which were generally more attractive to for-profit landlords than home-owners (KMPG, 1995; Goodbody Economic Consultants, 2005).

Individual Impact

Tables 2 through 4 also set out the results of additional regression analyses which distinguish between the districts targeted by the Town, Rural and the Urban Renewal Schemes. These analyses highlight marked variations in the extent to which these different iterations of the fiscal incentives achieved their stated objectives.

For instance, the results of the estimation of the full version of the model presented in Table 2 through 4 indicate that the duration of inclusion in the Town Renewal Scheme did not have a statistically significant impact across any of the indicators of the schemes' objectives employed in this analysis. This outcome is most likely related to the very low take up of these incentives, as mentioned above (Goodbody Economic Consultants, 2005).

Similarly, the results set out in Table 2 indicate that the Rural Renewal Scheme did not have a statistically significant impact on population growth. This result is rather surprising in view high take-up of this element of the Section 23 incentives and the fact that, in the years following the introduction of this Scheme, the target region enjoyed the aggregate population increases for the first time in many decades (Goodbody Economic Consultants, 2005). However, Goodbody Economic Consultants' (2005) evaluation of the Rural Renewal Scheme revealed that a large proportion of the new residential units it subsidised were taken up by existing residents. Thus, its lack of impact on population growth may be because it enabled the division of existing households in its operational area rather than the entry of new households from elsewhere.

Table 3 also suggest that the Rural Renewal Scheme did have a statistically significant impact on employment growth but that this relationship was negative, while Table 4 reveals no statistically significant relationship between growth in private renting households and this Scheme. The latter finding may be related to the fact that, unusually in the context of the Section 23 programme as a whole, in the Rural Renewal Scheme area these incentives were taken up mainly by home owners rather than landlords (Goodbody Economic Consultants, 2005).

Analysis of the Urban Renewal Scheme reveals that it also had no impact on population growth in its target areas (see Table 2). During the pre 1996 phase of this Scheme there was no statistically significant relationship between duration of designation and population growth, during the pre 2006 phase there was a statistically significant relationship between these variables did exist but it was negative. By contrast during the closing phase of the Urban Renewal Scheme there was a statistically significant and positive relationship between duration of designation and employment, but no similar relationship existed using its opening phase (see Table 3). Rather surprisingly, in of the large numbers of new private rented dwellings subsidized by the Urban Renewal Scheme, Table 4 indicates that there was no statistically significant relationship between duration of designation under this scheme and growth in this category of dwellings during either its opening or closing phases.

Unintended Impacts:

Both the 1996 and 2005 reviews of the Urban Renewal Scheme examined the associated deadweight, but they employed different methodologies to do this – the 1996 review relied principally on interviews with key actors such as developers and planners, the 2005 review augmented this source of information with data on trends in housing output in designated districts prior to and during the lifetime of the incentives and data on output in comparable non designated

districts (KPMG, 1996; Goodbody Economic Consultants, 2005). The review of the first Urban Renewal Scheme concluded:

> It is unlikely that the initial residential developments in the inner cities would have gone ahead without the incentives for investors as much had already been done by local authorities to promote development in inner city areas by making sites available at little, or in some cases no, cost to developers. Ten years on, however, the concern of living in the city is firmly established and it is debateable whether or not development would continue without incentives. Trends in demand for residential accommodation in Dublin and in recent construction suggest that residential development is now a commercially viable option in inner city areas (KPMG, 1996, p 99).

Goodbody Economic Consultants' (2005) analysis suggests that deadweight rose significantly as the post 1998 period of the Urban Renewal Scheme progressed. They argue that it played an important role in animating development in the designated areas during the late 1990s and during this time 'dead weight at the project level tended to lie in the range of 20 to 40%', but by 2005 'it has risen above 70% in many cases' so 'the need for tax incentivisation of individual developments has diminished' (Goodbody Economic Consultants, 2005). This report links growing deadweight primarily to the success of the Scheme itself – the incentives were necessary to encourage 'pioneer investors' in declining urban areas, but once this initial development had taken place, its success encouraged further investment and incentives were a less important influence of investment decisions.

Goodbody Economic Consultants, (2005) suggest that the deadweight associated with the Rural Renewal Scheme investment was also high - some 46.4% of the housing development it subsidised would have gone ahead in its absence. In their view this problem was heightened by the fact that, unlike the Urban and Town Renewal Schemes, it applied to very large geographical areas, rather than specific districts, sites or buildings, and by the very high take-up of the incentives by the existing population, as mentioned above. The same report concludes that less deadweight was associated with the Town Renewal Scheme (in the region of 20%) but in the small number of districts where take-up was high, the deadweight effect was also higher (Goodbody Economic Consultants, 2005).

The KPMG (1996) report does not consider the other key unintended impact of the Urban Renewal Scheme which has been identified in the literature – the growth in vacant dwellings (Fitz Gerald, 2005). SAPS data on this issue is available for only one of the years under review in this paper (2006), but national data indicates that 10.4% of dwellings were long-term vacant in 1991, but vacancy rates were significantly lower in Dublin (4.7%) and the other four cities (6.7%) which were designated under the Urban Renewal Scheme. Goodbody Economic Consultants' (2005) review of the final phase of Section 23 incentives contracts other research which links these incentives directly to rising vacancy levels and ghost estates. They found 'little evidence of over-supply or vacant dwellings' related to the Urban and Town Renewal Scheme, but '... clear evidence of an over-supply of housing in the [Rural Renewal] Scheme area. House prices have fallen relative to [adjacent]... areas... There is also evidence in some locations of high vacancy rates and rapidly falling rents' (Goodbody Economic Consultants, 2005, p. 85, 53).

Regression analyses of the relationship between the duration of Section 23 incentives and 2006 SAPS data on the location of long-term vacant dwellings indicates these incentives are collectively associated with increased vacancy rates. The P Value tests set out in Table 5 reveals a statistically significant, positive relationship between the duration of designation and vacancy rates in all of the Section 23 target EDs but that the strength of this relationship is quite weak. However, the different Section 23 programmes did not have a uniform impact in this regard. Table 5 reveals a (slightly) positive and statistically significant relationship between these vacancy rates and duration of inclusion in the Rural Renewal Scheme and both phases of the Urban Renewal Scheme, but no statistically significant relationship in the case of the Town Renewal Scheme. Moreover, duration of designation explains a higher proportion of the observed variance in the case of the Urban and Rural Renewal Schemes than it can for the Town Renewal Scheme.

Table 5: Regression of Long-term Vacant Dwellings on Designation Duration with Electoral District Socio-Economic Controls

Variable	All Cases				Urban Renewal Scheme (All)				Urban Renewal Scheme (to 1996)				Rural Renewal Scheme				Town Renewal Scheme			
	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value	Coef.	Std Error	t stat	P value
Constant	0.18	0.00	96.92	**0.00**	0.14	0.00	47.81	**0.00**	0.14	0.00	51.15	**0.00**	0.19	0.00	83.76	**0.00**	0.19	0.01	23.40	**0.00**
Designation Duration (Y)	0.01	0.01	8.49	**0.00**	0.00	0.00	8.82	**0.00**	0.01	0.00	6.68	**0.00**	0.01	0.00	9.42	**0.00**	0.00	0.00	0.93	0.36
	Number of obs = 3,409 R-squared = 0.0207 Adj R-squared = 0.0204				Number of obs = 905 R-squared = 0.0794 Adj R-squared = 0.0784				Number of obs = 883 R-squared = 0.0482 Adj R-squared = 0.0471				Number of obs = 2,289 R-squared = 0.0373 Adj R-squared = 0.0369				Number of obs = 215 R-squared = 0.0040 Adj R-squared = 0.0007			
With Controls																				
Constant	0.18	0.00	58.00	**0.00**	0.14	0.00	29.20	**0.00**	0.15	0.00	48.17	**0.00**	0.20	0.00	44.29	**0.00**	0.18	0.03	6.72	**0.00**
Designation Duration (Y)	0.00	0.00	7.77	**0.00**	0.00	0.00	7.82	**0.00**	0.01	0.00	6.36	**0.00**	0.01	0.00	8.08	**0.00**	-0.00	0.00	-0.02	0.99
Old Dependency Ratio	-0.00	0.00	-11.2	**0.00**	-0.00	0.00	-7.04	**0.00**	-0.00	0.00	0.07	0.94	-0.00	0.00	-0.23	0.82	-0.00	0.00	-0.76	0.45
Young Dependency Ratio	0.00	0.00	1.79	0.07	0.00	0.00	0.29	0.78	0.00	0.00	6.50	**0.00**	0.00	0.00	5.30	**0.00**	-0.00	0.00	-1.09	0.28
Educ. Attain.	0.00	0.00	-0.99	0.32	-0.00	0.00	-2.60	**0.01**	0.00	0.00	-0.13	0.89	0.00	0.00	-0.73	0.47	-0.00	0.00	-1.39	0.17
Pop. Growth	-0.00	0.00	-5.28	**0.00**	0.00	0.00	0.13	0.89	-0.00	0.00	-1.10	0.27	-0.00	0.00	-8.46	**0.00**	-0.00	0.00	-0.12	0.90
Lab. Market	0.00	0.00	3.54	**0.00**	0.00	0.00	0.54	0.59	-0.00	0.00	-0.84	0.40	0.00	0.00	5.79	**0.00**	0.00	0.00	0.23	0.82
Private Renting	0.00	0.00	0.97	0.33	0.00	0.00	-0.11	0.91	0.00	0.00	0.07	0.94	0.00	0.00	2.48	**0.01**	-0.00	0.00	-1.67	0.97
	Number of obs = 3,409 R-squared = 0.0820 Adj R-squared = 0.0801 F (7, 3,401)= 43.40 Prob>F= 0.0000				Number of obs = 905 R-squared = 0.1554 Adj R-squared = 0.1488 F (7, 897)= 23.57 Prob>F= 0.0000				Number of obs = 882 R-squared = 0.1228 Adj R-squared = 0.1158 F (7, 875)= 17.50 Prob>F= 0.0000				Number of obs = 2,289 R-squared = 0.1098 Adj R-squared = 0.1071 F (7, 2,281)= 40.20 Prob>F= 0.0000				Number of obs = 215 R-squared = 0.0745 Adj R-squared = 0.0432 F (7, 207)= 2.38 Prob>F= 0.0232			

Further regression analysis reveals a similar relationship between duration of inclusion in the Section 23 scheme and ghost estates. There is a statistically significant and positive relationship between all the Section 23 schemes collectively and the incidence of ghost estates. Due to the relatively small number of observations in this analysis it was not disaggregated to take account of the various types of Section 23 incentive schemes.

Table 6: Regression of Volume of Ghost Estates on Designation Duration with Socio-Economic Controls

Variable	**All Cases**			
	Coef.	Std Error	t stat	P value
Constant	83.55	6.55	12.75	**0.00**
Designation Duration (Y)	8.89	1.69	5.25	**0.00**
	Number of obs = 1,033 R-squared = 0.0260 Adj R-squared = 0.0251			
With Controls				
Constant	110.5	12.21	9.07	**0.00**
Designation Duration (Y)	9.47	1.73	5.48	**0.00**
Old Dependency Ratio	-0.04	0.12	-0.32	0.75
Young Dependency Ratio	0.89	0.41	2.16	**0.03**
Educ. Attain.	-0.01	0.02	-0.65	0.52
Pop. Growth	-0.27	0.75	-0.35	0.72
Lab. Market	0.13	0.57	0.23	0.82
Private Renting	0.01	0.01	0.60	0.55
	Number of obs = 1,033 R-squared = 0.0343 Adj R-squared = 0.0277 F (7, 1,025)= 5.20 Prob>F= 0.0000			

Conclusions

This paper has examined the intended and unintended impacts of the 'Section 23' fiscal incentives which were intended to encourage the construction and refurbishment of private residential and business units in declining city districts, towns and rural areas of Ireland. It has revealed that collectively the different elements of this programme of incentives failed to achieve their key stated objective of increasing the population of target districts or increasing private rented dwellings but were associated with an increase in increasing employment in target neighbourhoods. However, the different elements of the programme (i.e. the Urban, Town and Rural Renewal Schemes) experienced variable success in achieving their stated aims, due in part to the varying implementational context over time and space. Take-up of the Town Renewal Scheme incentives was low and, consequently, this measure largely failed to achieve its stated aims or have any impact on dereliction in target neighbourhoods. Take-up of the Rural Renewal Scheme was high, consequently it drove a marked increase in new housing output (mainly owner occupied) in target neighbourhoods, but surprisingly, no increase in population or employment, because these dwellings were occupied mainly be existing residents or remained vacant. Due to the long duration of the Urban Renewal Scheme, its intended impact in 1996 and 2006 was examined separately. This analysis reveals that Urban Renewal had no impact on the private rented stock and population of target neighbourhoods, but it helped to largely eliminate dereliction ion in target neighbourhoods and had statistically significant, positive impact on employment during its closing phase. Research on the characteristics of residents of Urban Renewal incentivized residential developments indicates that this 'employment effect' is largely due to the entry of new residents in employment rather than the creation of new jobs for the original population, but nevertheless this development did significantly dilute spatial concentrations of low income households, particularly in Dublin inner-city (KMPG, 1996; Haase. 2009).

However, the analysis presented above has revealed that the Section 23 incentives were also associated with negative unintended or perverse outcomes which raise questions about the

decision to extend their duration as the Irish economy moved from stagnation to rapid growth and to extend their spatial focus from cities to rural areas. In relation to the former, in the context of a strong economic and construction boom, a substantial proportion of the developments that were subsidized by the Rural Renewal Scheme and the later phase of the Urban Renewal Scheme, would probably have gone ahead in their absence. Furthermore, these developments resulted in over-supply of housing leading to high vacancy rates and environmental problems due to the concentration of a significant proportion of these dwellings in unfinished 'ghost estates'. Thus collectively, these measures contributed to driving over investment in construction, construction price inflation and over-reliance on this industry for employment, economic growth, tax revenue and bank investment during the celtic tiger economic boom, which subsequently made a key contribution to the very severe economic contraction and associated fiscal and banking crisis Ireland has suffered in the wake of the 2007 global financhial crisis (see: Kelly, 2009; National Economic and Social Council, 2009).

Thus the Section 23 programme demonstrates that fiscal incentives for property development can be a very effective mechanism for drawing private investment into property development in declining areas because they are easy for developers to understand and for government to implement and are associated with higher take up than direct public investment (Adair, *et al.,* 2003 reach the same conclusions). However, if applied in an inappropriate context, these measures can generate problematic perverse outcomes. They are useful for animating development in clear instances of market failure, such as brownfield urban sites which commonly require assembly from several owners or declining districts of otherwise successful cities but in these cases, the incentives should be closely monitored and withdrawn if this market failure dissipates (Jones, 1996). The Rural Renewal Scheme indicates that, in the context of a liberal land use planning regime such as Ireland's (Gkartzios and Scott, 2009), low housing output in greenfield, rural sites is less likely to be related to market failure and more likely the result of lack of housing demand. In this context, incentives for housing development are likely to result in housing oversupply and attendant vacancy problems.

Thus, the Section 23 scheme also illustrates the difficulties associated with strategic use and withdrawal of fiscal incentives for property led regeneration, as contrary to advice from independent commentators and the finance ministry, these schemes were repeatedly expended by government. As Howard's (1997) classic study of fiscal reliefs in the United States demonstrates, this expansionist tendency is much stronger in indirect subsidies, compared to direct public investment, because the full costs of the former are more difficult to predict and calculate and therefore less likely to attract opposition from policy makers.

References

ADAIR, A, BERRY, J. and MCGREAL, S. (2003) Financing property's contribution to regeneration, **Urban Studies** 40, pp. 1065-1080.

Carmon, N. (1999), Three generations of urban renewal policies: analysis and policy implications. **Geoforum**, 30, pp. 145-158

DEPARTMENT of FINANCE (1999) **Budget 2000 - Tax Strategy Group Papers: TSG99/32 - Urban and Rural Renewal Tax Incentive Schemes**, Dublin: DoF.

DEPARTMENT of the ENVIRONMENT (1997) **1998 Urban Renewal Scheme: Guidelines***,* Dublin: DoE.

DEPARTMENT of the ENVIRONMENT and LOCAL GOVERNMENT (1999) **Town Renewal Scheme Guidelines,** Dublin: DoE.

DEPARTMENT of THE ENVIRONMENT, COMMUNITY and LOCAL GOVERNMENT (various years), **Annual Housing Statistics Bulletin**. Dublin: DECLG.

DEPARTMENT of THE ENVIRONMENT, COMMUNITY and LOCAL GOVERNMENT (2010) **National Housing Development Survey***,* Dublin: DoECLG.

FITZ GERALD, J. (2005) The Irish housing stock: Growth in number of vacant dwellings, **Quarterly Economic Commentary** 24, pp**.** 1-22.

FITZPATRICK ECONOMIC CONSULTANTS (2005) **Community Support Framework 2000-2006: Update Evaluation**. Dublin: FEC.

GIRST, B. (2003) Planning, in M, CALLANAN and J. KEOGAN (eds) **Local Government: Inside out**, pp. 221-252, Dublin: Institute of Public Administration.

GKARTZIOS, M. and NORRIS, M. (2011) If you build it, they will come': governing property-led rural regeneration in Ireland, **Land Use Policy**, 28, pp**.** 447-638.

GKARTZIOS, M. and SCOTT, M. (2009) Planning for Rural Housing in the Republic of Ireland: from national spatial strategies to development plans, **European Planning Studies**, 17, pp. 1751–1780.

GOODBODY ECONOMIC CONSULTANTS (2005) **Review of Area-based Tax Incentive Renewal Schemes**. Dublin: Goodbodyn.

HAASE, T (2009), **Divided City – The Changing Face of Dublin's Inner City**, Dublin: Dublin Inner-city Partnership.

HEALEY, P., DAVOUDI, S., O'TOOLE, M., USHER, D., TAVSANOGLU, S. (1992) **Rebuilding the City: Property-Led Urban Regeneration**. Spon, London.

HEMPHILL, L., BERRY, J. and MCGREAL, S. (2004) An Indicator-based Approach to Measuring Sustainable Urban Regeneration Performance, **Urban Studies 41,** pp. 725-755.

HOSMER, D and LEMESHOW, S (2000), **Applied Logistic Regression***,* London: Wiley.

HONOHAN, P and WALSH, B (2002), Catching Up with the Leaders: The Irish Hare, **Brookings Papers on Economic Activity***,* 33, pp. 1-78.

HOWARD, C. (1997) **The Hidden Welfare State: tax expenditures and social policy in the United States.** Princeton: Princeton University Press.

JONES, C. (1996) The theory of property-led local economic development policies, **Regional Studies**, 30, pp. 797-801.

JONES, P. and EVANS, J. (2008) **Urban regeneration in the UK**. Sage, London.

KEANE, M. and GARVEY, E. (2006) Measuring the employment effects of the Rural Renewal Tax Scheme, **Regional Studies** 40, pp**.** 359-374.

KELLY, M. (2009) **The Irish Credit Bubble**. Dublin: UCD, Geary Institute.

KPMG (1996) **Study on the Urban Renewal Schemes**, Dublin: DoE.

KITCHIN, R., GLEESON, J., KEAVENEY, K. and O'CALLAGHAN. (2010) **A haunted landscape: Housing and ghost estates in post-celtic Tiger Ireland**. Maynooth: NIRSA, NUI Maynooth.

MACLARAN, A. and MURPHY, L. (1997) The problems of taxation-induced inner-city housing development – Dublin's recipe for success, **Irish Geography** 30: 31-36.

MCDONALD, F. and SHERRIDAN, K. (2008) **The Builders: How a Small Group of Property Developers Fuelled the Building Boom and Transformed Ireland**, Penguin Ireland, Dublin.

NATIONAL ECONOMIC and SOCIAL COUNCIL (2009) **Ireland's Five-Part Crisis: An Integrated National Response***.* Dublin: NESC.

NORRIS, M. and SHIELDS, P. (2007) Housing affordability in the Republic of Ireland: Is planning part of the problem or part of the solution? **Housing Studies***,* 22, pp. 45-62.

Murdoch, J. and Lowe, P 2003. The preservationist paradox: modernism, environmentalism and the politics of spatial division. **Transactions of the Institute of British Geographers** 28, pp. 318-322.

O'BRIEN, C. (2008) 'Empty Homes, Broken Promises', **The Irish Times***,* 6th of December.

ROBERTS, P. (2000) The evolution, definition and purpose of urban regeneration, in ROBERTS, P. and SYKES, H. (Eds) *Urban Regeneration: A Handbook*, Sage, London.

Scott, M. and Murray, M. 2009. Housing Rural Communities: Connecting Rural Dwellings to Rural Development in Ireland. **Housing Studies**, 24, pp. 755-774.

van der Ploeg, J.D., Renting, H., Brunori, G., Knickel, K., Mannion, J., Marsden, T., de Roest, K., Sevilla-Guzman, E. and Ventura, F. 2000. Rural Development: From Practices and Policies towards Theory. **Sociologia Ruralis** 40, pp. 391-408.

WILLIAMS, B. (2006) Fiscal Incentives and Urban Regeneration in Dublin: 1986-2006, **Journal of Property Investment and Finance** 34: 542-558.

WONG, C. (2006) **Indicators for Urban and Regional Planning: The Interplay of Policy and Methods**. Routledge, London.